

Remarks

Claims 1-11 remain in the application. The claims are resubmitted without amendments together with arguments in support of the express limitations that particularly and patentably define the present invention over the teachings of the cited reference and other references of record. Amendments to the specification clarify the original written description of the claim limitation recited, and clarify obviously erroneous recitations for the sake of clarity. Accordingly, all of the claims are now considered in condition for allowance.

Upon reviewing the application, Applicant's attorney noted that references to "plurality" for programming the digital input and output ports should be amended to refer to the "polarity" of the digital ports that inherently are open (0) or closed (1). Changes made at page 8, lines 11-14 are made to render the application consistent with the original teachings as at page 8, lines 20-21, and do not add new matter to the application. Moreover, the amendments are consistent with the original disclosure and clarify the teachings of the written description to persons of ordinary skill in the art.

The specification has also been amended at page 5, line 10 to refer to the systems that are recited later in the description of the preferred embodiment, page 8, line 21 through page 9, line 2. Since the controller governs both fuel supply and engine braking, such as compression braking, as particularly defined in the original claims, changes to the specification are consistent with the originally claimed invention, and do not add new matter to the application. Moreover, the changes merely clarify the written description to the understanding of a person of ordinary skill in the art and do not add new matter to the application.

The Examiner rejected claims 1-11 as anticipated by the teachings of the patent to Brocard et al. However, the Brocard et al. patent expressly refers to control of turbojet engines for an aircraft, and such engines do not inherently include engine braking, such as compression braking, as expressly recited in the claims. Contrary to the Examiner's position

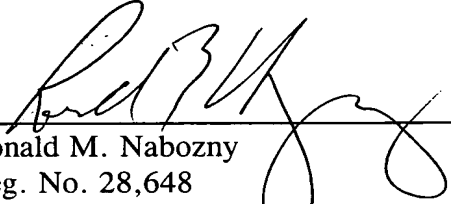
that such a feature is disclosed in Brocard et al., the teachings at column 4, lines 12-14 establish that the invention applies to cutoff on stop feature and a stop on overspeed operation, as well as testing of these two functions. There is no teaching or suggestion of compression braking or equivalents such as drivetrain brakes that may be utilized to impede engine speed in internal combustion engines. The engine braking claimed reduces speed but does not shut down the engine as taught by the reference at column 9, line 55 to column 10, line 2.

An engine braking system such as the compression braking is well known as evidenced by U.S. Patent No. 5,758,620 that includes background establishing that compression brake features have been known for at least 40 years. Generally, such a system operates by opening an exhaust valve during a portion of the combustion cycle at which the valve is usually closed. Of course, the details of how such systems operate is not necessary to understand that they impose a physical restriction on the speed of the engine, and often involve the use of a solenoid controlled by an electronic engine module. The importance of combining such a control operation together with a response to overspeed operation that inhibits responses to throttle control actuation is taught only in the present application, for example, in the limitations of the originally filed independent claims 1, 6 and 9, and the written description as at page 8, line 29 through page 9, line 6. Moreover, while claims 6 and 9 expressly refer to compression ignition internal combustion engines to which the engine braking is applied, claim 1 more generally defines engine braking. Nevertheless, active engine braking does not result from a stop on overspeed feature or a cutoff on stop feature as defined in the cited Brocard et al. reference. Accordingly, the claimed invention is a combination that particularly and patentably defines the present invention over the teachings of the cited reference and other references of record. Regardless of whether engine brakes such as exhaust brakes, driveline retarders, transmission retarders or others may be used to induce the engine braking, the control combining braking with throttle actuation response inhibition as claimed does not result from an obvious combination of known patents under 35 U.S.C. § 103.

In view of the foregoing, Applicant respectfully submits that the present application is now in condition for allowance, and such action is respectfully requested.

Respectfully submitted,

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Date: September 24, 2004

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